W. E. COFFIN.

CAR COUPLING.

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1,201,699.

Patented Oct. 17, 1916

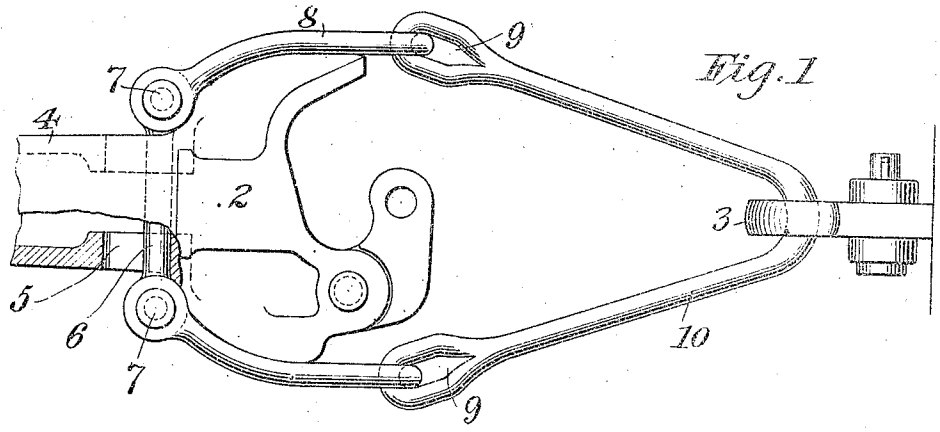


Fig. 1

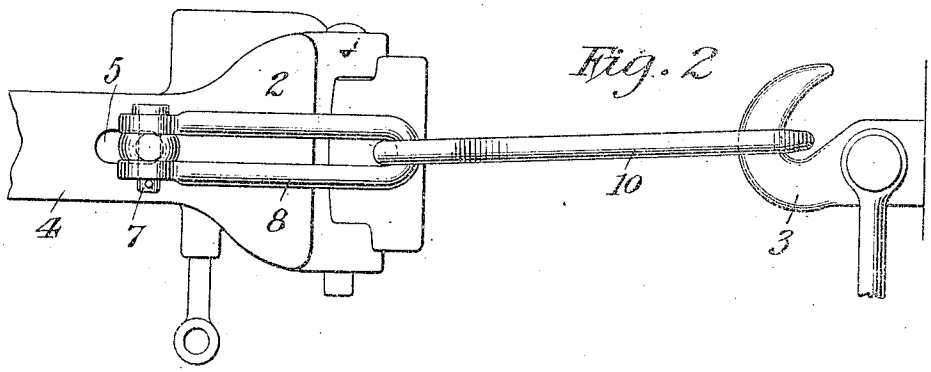


Fig. 2

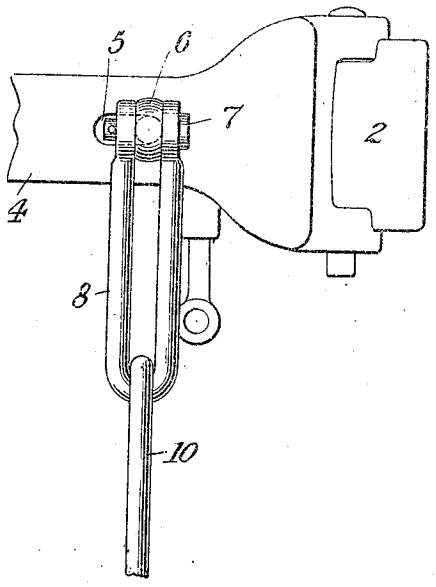


Fig. 3

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

1,201,699. Specification of Letters Patent. Patented Oct. 17, 1916.

Application filed August 31, 1915. Serial No. 48,153.

To all whom it may concern:

Be it known that I, WALTER E. COFFIN, a citizen of the United States, residing at Cleveland, Cuyahoga county, Ohio, have invented new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan of a car coupler embodying my invention coupled with a coupler of a different type; Fig. 2 is an elevation thereof, and Fig. 3 is a further elevation showing the mechanism of my invention in inoperative position.

My invention relates to car couplers of the Master Car Builders' type, and consists in providing a connection by which the coupler may be coupled to a car coupler of a different type.

My invention also consists in the construction and arrangement of parts which I shall hereinafter describe and claim.

Referring to the drawings, 2 indicates a car coupler of the Master Car Builders' type and 3 a hook coupling with which the coupler 2 is intended to be connected. The coupler 2 has in its shank 4 a transverse slot 5, adapted for the reception of an eye-bar 6, round in cross-section. Pivotally secured to either end of the eye-bar by the pins 7, are clevises 8, so shaped as to conform to the external contour of the sides of the coupler-head. Attached to the forward end of each clevis 8 is an eye 9 of the bail-rod 10, the central portion of which forms a connection with the hook coupling 3. The external contours of the guard arm side and the pivot pin side of the coupler are preferably symmetrical with respect to each other, so that the two clevises 8 may be made alike and be accordingly used on either side of the coupler head.

When it is desired to connect a car coupler of the Master Car Builders' type with a coupling of another character, such as the hook coupling 3, my invention may be conveniently applied by assembling the bail-rod 10 with the two clevises 8, and then, after the bar 6 is inserted through the slot 5, the clevises 8 are attached to the eyes of the bar 6 by the pins 7. The device will then depend under the coupler head, as is shown in Fig. 3, in which position it is ready for service. When the cars are brought to the proper distance from each other, the device may be lifted to engaging position so that the bail-rod 10 may be hooked over the coupling 3 and the coupling thus effected. The cars may be uncoupled by merely disconnecting the bail-rod 10 from the hook coupling 3. When so disconnected the bail and clevises will drop again down under the coupler-head, depending from the bar 6 as a pivot. In such position, the coupling mechanism will not interfere with the intercoupling of the coupler 2 with another coupler of the Master Car Builders' type.

The terms and expressions which I have employed are used as terms of description and not of limitation, and I have no intention, in the use of such terms and expressions, of excluding any mechanical equivalents of the features shown and described, or portions thereof, but recognize that various structural modifications are possible within the scope of the invention claimed.

What I claim is:

1. A car coupler of the Master Car Builders' type having a transversely-slotted shank and having the external contour of its knuckle and guard-arm sides symmetrical, in combination with a connecting mechanism to intercouple with a coupler of a different type, said connecting mechanism consisting of a pair of symmetrical and interchangeable links conforming to the contour of the coupler sides, secured at one end for pivotal movement to a bar seated in the slot in the shank and at the other end to a bail-like member.

2. An automatic coupler adapted to receive an intermediate loop-shaped device for connection to couplers of another type, said coupler comprising a head and a shank, the sides of said head being symmetrically curved and forming a support to prevent collapse of the loop under pulling strains, and said shank having a transverse slot immediately behind said head, adapted to receive a portion of the loop-shaped device.

3. A car coupler of the Master Car Builders' type having a transversely-slotted shank, in combination with a connecting mechanism adapted to intercouple with a car coupler of a different type, said connecting mechanism consisting of a rotative member adapted to seat in said transverse slot, links conforming to the external contour of the coupler of the first-mentioned type, and bail adapted to intercouple with the second-

mentioned coupler having a pivotal engagement with the links, said connecting mechanism being adapted during buffing to drop down below the said couplers and permit the transmission of buffing stresses without injury thereto, and when disconnected from the second-mentioned coupler to depend beneath the first-mentioned coupler.

4. A car coupler of the Master Car Builders' type adapted to receive an intermediate loop shaped device for connection with a coupler of a different type, said first mentioned coupler comprising a head and a shank provided with means for pivotally attaching and for supporting a pair of symmetrically formed links, said links being connected at their forward ends by a bail shaped member and adapted when under draft to bear against the sides of the coupler head and be supported against collapse thereby, and when not in use to swing into a vertical inoperative position beneath the first mentioned coupler.

WALTER E. COFFIN.